

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number  
**WO 2005/093497 A1**

(51) International Patent Classification<sup>7</sup>: **G02F 1/01**,  
H04B 10/18

(21) International Application Number:  
PCT/JP2004/004187

(22) International Filing Date: 25 March 2004 (25.03.2004)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

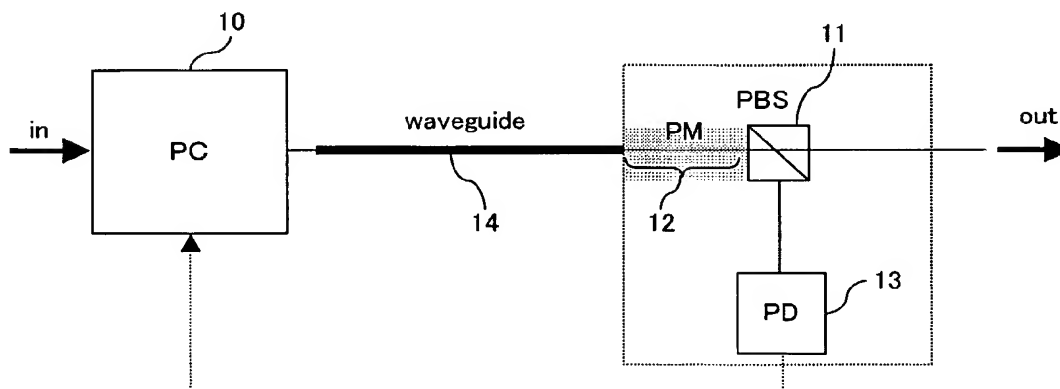
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR CONTROLLING POLARIZATION OF LIGHT IMPUTED TO POLARIZATION-MAINTAINING WAVEGUIDE COMPONENTS



(57) Abstract: A nonlinear birefringent waveguide is used for four wave mixing, wavelength conversion, Raman amplification, etc. In order to adjust the polarization of the input light to such waveguide 14, a polarization controller 10 is provided. And at the output side of the waveguide 14, a polarization beam splitter is provided. The polarization beam splitter splits one of orthogonal polarizations which is not desired to be passed through. The power of the split light is detected at photodiode 13. The detection signal of the photodiode 13 is fed back to the polarization controller 10. The polarization controller 10 controls the polarization of input light so that the power of light detected at the photodiode 13 is minimized.

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